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PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/883,899	06/18/2001	Reiko Kondo	0941.65628	0941.65628 2563	
24978 7	590 01/30/2004		EXAMINER		
GREER, BURNS & CRAIN			KLIMOWICZ, WILLIAM JOSEPH		
300 S WACKE 25TH FLOOR			ART UNIT	PAPER NUMBER	
CHICAGO, IL 60606			2652	13	
			DATE MAILED: 01/30/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/883,899	KONDO ET AL.				
Office Action Summary	Examiner	Art Unit				
	William J. Klimowicz	2652				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.135(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status						
1) Responsive to communication(s) filed on <u>02 J</u>	1) Responsive to communication(s) filed on <u>02 January</u> 2004.					
2a) ☐ This action is FINAL. 2b) ☒ This	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1,2 and 4-10</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1, 2, 4-10</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. §§ 119 and 120						
12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)☐ All b)☐ Some * c)☐ None of:						
<ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> </ol>						
3. Copies of the certified copies of the priority documents have been received in Application Not.						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.						
a) $\square$ The translation of the foreign language provisional application has been received.						
14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413) Paper No(s)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) 🔲 Notice of Informal F	Patent Application (PTO-152)				
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	6) [_] Other: .					
U.S. Patent and Trademark Office PTOL-326 (Rev. 11-03)  Office Advanced in the Control of the Co	ction Summary	Part of Paper No. 13				

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## **DETAILED ACTION**

## Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 4, 2003 (Paper No. has been entered.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2 and 4-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al (US 6,223,420 B1).

As per claims 1 and 8-10, Lee et al (US, 6,223,420 B1) discloses a magnetic head and a magnetic reproducing device (e.g., FIGS. 9 and 10 in conjunction with COL. 7, lines 58 et seq. and/or alternatively, the embodiment, e.g. including FIG. 13) comprising: a magnetoresistance film (e.g., 218); a flux guide (208) formed so as to overlap said magnetoresistance film (202) (e.g., due to at least a taper overlapping at (220)), said flux guide (208) being out of plane with

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said magnetoresistance film (1) - see FIG. 10, the flux guide (208) guiding a signal magnetic field from a magnetic recording medium (at (218) to said magnetoresistance film (202); see COL. 7, lines 58 et seq.; and a flux-guide regulating film (204/206) aligning magnetic domains of said flux guide (208) into a single magnetic domain (e.g. see *inter alia*, COL. 7, line 66 through COL. 8, line 13).

As per claim 2, wherein said flux guide (208) is formed as a separate element from said magnetoresistance film (202) - FIG. 10.

As per claim 4, wherein at least one of sides and surfaces of said flux-guide regulating film (204/206) is magnetically connected with said flux guide (208) - FIG. 9.

As per claim 5, said flux-guide regulating film (24/25) is one of a highly coercive-force film and an antiferromagnetic film (e.g. see *inter alia*, COL. 7, line 67 through COL. 8, line 2).

As per claim 6, wherein said flux-guide regulating film (204/206) also aligns magnetic domains of said magnetoresistance film (202) into a single magnetic domain (e.g. see *inter alia*, COL. 7, line 66 through COL. 8, line 13).

As per claim 7, wherein said magnetoresistance film (202) is a magnetoresistance film of one of a spin-valve type and a tunnel junction type 9e.g. see, *inter alia*, COL. 5, lines 65-67).

Additionally, as per claim 8, Lee et al (US 6,223,420 B1) discloses a magnetic reproducing device (e.g., FIGS. 1 and 2) comprising: a magnetic head (e.g. 42) including the aforementioned magnetoresistance film (202) and flux guide (208).

Additionally, as per claims 9 and 10, the flux-guide regulating film (204/206) aligning magnetic domains of said flux guide (208) into a single magnetic domain, wherein said flux

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guide (208) is formed out of plane with and as a part of said magnetoresistance film (since it is in direct immediate contact therewith as a "contiguous junction" with no intervening material.

## Response to Arguments

Applicant's arguments with respect to claims 1, 2 and 4-10 have been considered but are most in view of the new ground(s) of rejection.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Klimowicz whose telephone number is (703) 305-3452. The examiner can normally be reached on Monday-Thursday (6:30AM-5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

William J. Klimowicz Primary Examiner

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WJK